

CLAIMS

1. A support having an affinity for an antibody, which comprises a protein or peptide capable of binding to an antibody molecule,

said protein or peptide being immobilized at a carboxy end thereof to an insoluble support having a primary amino group via an amide bond mediated by a linker sequence.

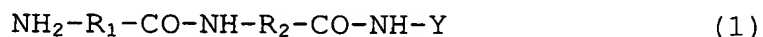
2. The support having an affinity for an antibody according to claim 1, wherein said immobilized insoluble support having a primary amino group comprises a polymer compound having a primary amino group in the repeated structure thereof.

3. The support having an affinity for an antibody according to claim 2, wherein the polymer compound having a primary amino group in the repeated structure thereof is polyarylamine.

4. The support having an affinity for an antibody according to claim 2, wherein the polymer compound having a primary amino group in the repeated structure thereof is polylysine.

5. The support having an affinity for an antibody according to any one of claims 1 to 4, wherein the protein capable of binding to an antibody molecule has an amino acid sequence selected from the group consisting of the amino acid sequences represented by SEQ ID NOs:1 to 4 in Sequence Listing.

6. The support having an affinity for an antibody according to claim 1, which is represented by the following formula (1):



wherein R₁ represents an amino acid sequence of the protein or peptide capable of binding to an antibody molecule; R₂ arbitrarily represents an amino acid sequence of the linker sequence; and Y arbitrarily represents said immobilized support.

7. The support having an affinity for an antibody according to claim 6, wherein the moiety represented by CO-NH-R₂-CO in the formula (1) is represented by the following formula (4):



wherein m represents a positive integer.

8. The support having an affinity for an antibody according to claim 6, wherein the amino acid sequence of

the protein capable of binding to an antibody molecule in the formula (1) is any one of the sequences represented by SEQ ID NOs:1 to 4 in Sequence Listing.

9. A support for purifying an antibody, which comprises the support having an affinity for an antibody according to any one of claims 1 to 9.

10. A method for separating and purifying an antibody molecule, which comprises using the support having an affinity for an antibody according to any one of claims 1 to 8.

11. A modified protein binding to an antibody, which is represented by the following formula (2):



wherein R_1 represents an amino acid sequence of a protein or peptide capable of binding to an antibody molecule; R_2 arbitrarily represents an amino acid sequence of a linker sequence; and R_3 represents an amino acid sequence which is strongly negatively charged around neutrality and is capable of making an isoelectric point of $\text{NH}_2\text{-R}_1\text{-CONH-R}_2\text{-CO-NH-CH(CH}_2\text{-SH)-CO-NH-R}_3\text{-COOH}$ acidic.

12. The modified protein binding to an antibody according to claim 11, wherein the moiety represented by

NH-R₃-COOH in the formula (2) is represented by the following formula (3):



wherein n represents a positive integer.

13. The modified protein binding to an antibody according to claim 11, wherein the moiety represented by CO-NH-R₂-CO in the formula (2) is represented by the following formula (4):



wherein m represents a positive integer.

14. The modified protein binding to an antibody according to claim 11, wherein the amino acid sequence of the protein capable of binding to an antibody molecule in the formula (2) is any one of the sequences represented by SEQ ID NOS:1 to 4 in Sequence Listing.